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STATE WATER RESOURCES CONTROL BOARD BOARD MEETING SESSION – DIVISION OF WATER QUALITY TBD, 2009

ITEM

SUBJECT

CONSIDERATION OF A RESOLUTION APPROVING AN AMENDMENT TO THE WATER QUALITY CONTROL PLAN FOR THE LOS ANGELES REGION (BASIN PLAN) TO ADOPT CONDITIONAL SITE SPECIFIC OBJECTIVES (SSOs) FOR CHLORIDE AND REVISE THE UPPER SANTA CLARA RIVER CHLORIDE TOTAL MAXIMUM DAILY LOAD (TMDL)

DISCUSSION

On December 11, 2008, the Los Angeles Regional Water Quality Control Board (Los Angeles Water Board) adopted conditional SSOs for chloride and revised the Upper Santa Clara River chloride TMDL in <u>Resolution No. R4-2008-012</u>. On July 10, 2003, the Los Angeles Water Board adopted the TMDL to address chloride impairments of the Upper Santa Clara River (Resolution No. R4-2003-008). On May 6, 2004, the Los Angeles Water Board revised the interim wasteload allocations and implementation schedule (Resolution No. R4-2004-004). The amended TMDL was approved by the State Water Resources Control Board (State Water Board Resolution) under Resolution No. 2004-0048, the Office of Administrative Law (OAL), and the United States Environmental Protection Agency (U.S. EPA), and became effective on May 4, 2005.

At the time the original TMDL was adopted and approved, there remained key scientific uncertainties regarding the sensitivity of crops to chloride and the complex interactions between soils, surface water, and groundwater in the Upper Santa Clara River watershed. However, in the TMDL the Los Angeles Water Board found that the high levels of chloride were primarily caused by imported source water from the State Water Project and chloride added by domestic uses, including self-regenerating water softeners. These chloride sources are loaded into the Upper Santa Clara River in effluent from the Saugus and Valencia Water Reclamation Plants (WRPs) that serve residents and industries in the Santa Clarita Valley. The Los Angeles Water Board acknowledged that it might revise the chloride water quality objectives (WQOs) and included a timeline for consideration of Site Specific Objectives (SSOs). The TMDL included a requirement for the Santa Clarita Valley Sanitation District of Los Angeles County to implement the following special studies and actions, which are designed to reduce chloride loadings from the Saugus and Valencia WRPs:

- Literature Review and Evaluation review agronomic literature to determine a chloride threshold for salt sensitive crops.
- Extended Study Alternatives identify agricultural studies, including schedules and costs, to refine the chloride threshold.
- Endangered Species Protection review available literature to determine chloride sensitivities of endangered species in the Upper Santa Clara River.
- Groundwater and Surface Water Interaction Study determine chloride transport and fate from surface waters to groundwater basins underlying the Upper Santa Clara River.

- Conceptual Compliance Measures identify potential chloride control measures and costs based on different hypothetical WQO and final wasteload allocation scenarios.
- SSOs and Antidegradation Analysis consider a site-specific objective for chloride based on the results of the agricultural chloride threshold study and the Groundwater and Surface Water Interaction study.

The TMDL special studies were conducted in a facilitated stakeholder process in which stakeholders participated in scoping and reviewing the studies. This process resulted in a stakeholder-developed alternative TMDL implementation plan that addresses chloride impairment of surface waters and degradation of groundwater. The alternative TMDL implementation plan, termed "Alternative Water Resources Management" (AWRM) was first set forth by upper basin water purveyors and United Water Conservation District, the management agency for groundwater resources in the Ventura County portions of Upper Santa Clara River watershed.

The Los Angeles Water Board found that the existing studies and plan provide sufficient information on the chloride impact threshold for salt-sensitive crops, the chloride threshold for endangered species, and the hydraulic and contaminant interactions between surface waters and groundwater basins in the Upper Santa Clara River watershed to demonstrate that conditional SSOs, combined with reverse osmosis technology, would effectively reduce chloride loadings and protect beneficial uses. The Literature Review and Evaluation provided a scientifically defensible baseline to support a WQO of 117 milligrams per liter (mg/L) for chloride that is protective of agricultural supply beneficial use. The AWRM consists of chloride source reduction actions and chloride load reduction through advanced treatment of the Valencia WRP effluent, in conjunction with conditional SSOs. These source and load reductions mitigate the effect of chloride accumulation in the groundwater basin.

The TMDL provides a ten-year implementation schedule to attain compliance with the conditional SSOs. Key uncertainties regarding the identification of the optimum method for brine disposal remain. Several options, including deep-well injection in the vicinity of old oil fields in the Santa Clarita Valley, and drying with landfill disposal of the residual, will be considered by the Santa Clarita Sanitation District of Los Angeles County in the first two years of the TMDL implementation schedule. The recommended WQO changes in the Basin Plan amendment are conditioned on implementation of the AWRM program; if the AWRM system is not implemented, the WQOs revert to the current levels in the Basin Plan.

POLICY ISSUE

Should the State Water Board approve the amendment to the Basin Plan to adopt conditional SSOs for chloride and revise the Upper Santa Clara River chloride TMDL as adopted by Los Angeles Water Board Resolution No. R4-2008-012?

FISCAL IMPACT

Los Angeles Water Board and State Water Board staff work associated with or resulting from this action will be addressed with existing and future budgeted resources.

REGIONAL WATER BOARD IMPACT

Yes, approval of this resolution will amend the Los Angeles Water Board's Basin Plan.

STAFF RECOMMENDATION

That the State Water Board:

- 1. Approves the amendment to the Basin Plan as adopted under Los Angeles Water Board Resolution No. R4-2008-012.
- Directs the Executive Director or designee to submit the amendment adopted under Los Angeles Water Board Resolution No. R4-2008-012 to OAL for approval of the regulatory provisions and to U.S. EPA for approval of the TMDL and the Surface Water Quality Objectives.

State Water Board action on this item will assist the Water Boards in reaching Goal 1 of the Strategic Plan Update: 2008-2012 to implement strategies to fully support the beneficial uses for all 2006-listed water bodies by 2030. In particular, approval of this item will assist in fulfilling Action 1 to prepare, adopt, and take steps to carry out TMDLs, designed to meet water quality standards, for all impaired water bodies on the 2006 list.

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STATE WATER RESOURCES CONTROL BOARD RESOLUTION NO. 2009-

APPROVING AN AMENDMENT TO THE WATER QUALITY CONTROL PLAN FOR THE LOS ANGELES REGION (BASIN PLAN) TO ADOPT CONDITIONAL SITE SPECIFIC OBJECTIVES (SSOs) FOR CHLORIDE AND REVISE THE UPPER SANTA CLARA RIVER CHLORIDE TOTAL MAXIMUM DAILY LOAD (TMDL)

WHEREAS:

- 1. On October 24, 2002, the Los Angeles Regional Water Quality Control Board (Los Angeles Water Board) adopted an amendment to the Basin Plan, Resolution No. 02-018, to include a TMDL for Chloride in the Upper Santa Clara River. The State Water Resources Control Board (State Water Board) remanded the TMDL on February 19, 2003 under State Water Board Resolution No. 2003-0014. In the remand, the State Water Board directed the Los Angeles Water Board to consider a phased implementation plan which would allow for the completion of special studies, before dischargers were required to plan and construct advanced treatment technologies. In response to the remand, the Los Angeles Water Board adopted Resolution No. 03-008 on July 10, 2003. On May 6, 2004, the Los Angles Water Board adopted Resolution No. 04-004 which revised the interim wasteload allocations and implementation plan. In the amendment, the Los Angeles Water Board required the completion of several special studies that would characterize the sources, fate, transport, and specific impacts of Chloride in the Upper Santa Clara River, including impacts to downstream reaches and underlying groundwater basins. On August 3, 2006, under Resolution No. 06-016, the Los Angeles Water Board revised the implementation schedule of Resolution No. 04-004 based on a literature review and evaluation. The State Water Board approved the resulting Basin Plan amendment under State Water Board Resolution No. 2007-0029. In approving the amendment, the State Water Board directed the Los Angeles Water Board to consider variability in the SSO for chloride to account for the effects of drought on source water quality. The amendment was approved by Office of Administrative Law (OAL) on August 15, 2007.
- On December 11, 2008, the Los Angeles Water Board adopted <u>Resolution No. R4-2008-012</u> amending the Basin Plan to adopt conditional SSOs for chloride and revise the Upper Santa Clara River chloride TMDL.
- 3. The Los Angeles Water Board found that the analysis contained in the Final Project Report, the California Environmental Quality Act (CEQA) "Substitute Environmental Document" for the proposed Basin Plan amendment, including the CEQA Checklist, the staff report, and the responses to comments prepared by Los Angeles Water Board staff and Resolution R4-2008-012 adopted by the Los Angeles Water Board complies with the requirements of the State Water Board's certified regulatory CEQA process, as set forth in the California Code of Regulations, Title 23, section 3775 et seq.
- 4. The State Water Board finds that in amending the Basin Plan the Los Angeles Water Board complied with the requirements set forth in sections 13240, 13241, and 13242 of the California Water Code. The State Water Board also finds that the regulatory action meets the "Necessity" standard of the Administrative Procedures Act, Government Code section 11353, Subdivision (b).

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- 5. The Los Angeles Water Board found that adoption of this amendment is consistent with the Statement of Policy with Respect to Maintaining High Quality of Waters In California (<u>State</u> <u>Water Board Resolution No. 68-16</u>) and Federal Antidegradation Policy (40 CFR 131.12).
- 6. Numeric targets expressed as loading capacities for the TMDL are based on the site-specific water quality objectives provided in the Basin Plan amendment. Compliance with the targets will be based on a ten-year implementation schedule.
- A Basin Plan amendment does not become effective until approved by the State Water Board and until the regulatory provisions are approved by OAL. The TMDL and Surface Water Quality Objectives must also be approved by the U.S. Environmental Protection Agency (U.S. EPA).

THEREFORE BE IT RESOLVED THAT:

The State Water Board:

- 1. Approves the amendment to the Basin Plan as adopted under Los Angeles Water Board Resolution No. R4-2008-012.
- Directs the Executive Director or designee to submit the amendment adopted under Los Angeles Water Board Resolution No. R4-2008-012 to OAL for approval of the regulatory provisions and to U.S. EPA for approval of the TMDL and the Surface Water Quality Objectives.

CERTIFICATION

The undersigned Clerk to the Board does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the State Water Resources Control Board held on **TBD**.

Jeanine Townsend Clerk to the Board